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ABSTRACT

To obtain a current assessment of clientele preferences of extension program delivery methods in North Carolina, a study was conducted during summer 1992. Eleven Cooperative Extension agents from 11 counties chose a specific subject relevant to needs of their local audiences for the focus of an educational program, developed an objective for the educational program, and targeted a specific audience. Seven persons randomly selected from each agent's clientele list (n=77) were interviewed. To provide a reference source for those interviewed, a listing of 65 methods was compiled. Responses were analyzed from each county and from all counties combined. Although great diversity existed in the interests of the targeted audiences and program focuses, their preferences and reasons for those preferences were remarkably similar. Personal visits, meetings, newsletters, demonstrations, and workshops ranked highest. A clearly emerging newer technology was the videocassette. Reasons for choices focused almost exclusively on being able to use these methods for their subject and audience specificity. Considerable value was placed on the opportunity to see and do as well as discuss the information. Clients expected newer and emerging technologies to become more important, due to speed, ease, and efficiency. A t-test analysis revealed significant differences between age, years clients had received help from extension, educational levels, and preferred delivery methods. (Twenty-five tables are appended.) (YLB)

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CLIENTELE PREFERENCES FOR RECEIVING INFORMATION FROM EXTENSION: A North Carolina Study

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February 2, 1993

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CLIENTELE PREFERENCES FOR RECEIVING SPECIFIC INFORMATION FROM EXTENSION: A North Carolina Study

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Cooperative Extension education is based on non-formal program delivery in which participation is voluntary. Programs focus on analyzed needs of the publics in which Extension strives to serve, and a wide variety of choices exist for implementing educational programs.

As the Land Grant system evolved, printed materials such as research bulletins were printed and available for those persons who sought them out. Later, as Seaman Knapp began his extension work, the demonstration became the symbol of successful extension education. Indeed, "The County Agent" painting by Norman Rockwell depicts the Extension professional demonstrating selection characteristics of a 4-H calf (Rasmussen,1989).

Today, while many of the original program delivery methods used by Cooperative Extension are still used successfully, program delivery options and opportunities have changed as communications technologies have changed. Some technologies are now taken for granted as delivery methods, such as the telephone or radio that were unavailable in earlier years of extension education. Today, computer networks, satellite transmissions, and other hi-tech communications systems are becoming a normal part of our daily living. Yet, as Extension educators, attention must not only be given to delivery methods available, but to the utility of individual methods for achieving educational objectives, and to clientele preferences for receiving needed information.

CLIENTELE PREFERENCES

Over the years, numerous studies have been conducted of both clientele preferences and the effectiveness of individual methods in delivering Extension information. In an Iowa study, Martin and Omer (1988) reported that young farmers preferred that Extension agents use group oriented methods such as community meetings, and office and telephone conferences were of less importance for receiving information. To obtain information about environmental issues, Bruening (1991) reported that Pennsylvania farmers most prefer field demonstrations. County and local meetings as well as magazines and printed material also ranked high.

Among North Carolina farmers, Richardson (1989) reported that the five methods most frequently used for receiving Extension information were (1) newsletters, (2) meetings, (3) farm visits (agent to farmers), (4) telephone, and (5) on-farm tests and demonstrations. In this study, traditional program delivery methods were found to be popular, but the farmer clientele indicated an interest in using newer technologies such as computers and video tapes for receiving information in the future. There was a decline in popularity of bulletins and magazine articles for receiving information in the future.

While North Carolina farmers expected to use some types of printed materials less, others such as newsletters were popular. Similar opinions were held in Oklahoma, as farmers there rated newsletters and fact sheets highest in preference for receiving Extension information for making decisions on alternative enterprises (Keating, 1990). For information on new and innovative farming practices, Idaho farmers preferred more interpersonal methods. These methods included demonstrations, tours, field trips, and group discussion. Mass media methods were the least preferred means for receiving this type of information (Gor, 1990).

When using printed materials such as newsletters and fact sheets, studies in Florida and Oklahoma confirmed that acceptance and use of these means of delivery can be significantly enhanced by targeting the audience and tailoring the message to that audience (Nehiley and William, 1980), (Reisbeck, 1980). These studies demonstrate that the success or popularity of certain program delivery methods can be influenced by the efforts of the agent to package the message in a meaningful manner to an intended audience.

Through these studies, it is clear that clientele preferences do exist, and it is likely that no single delivery method is suitable for everyone. Yet, some trends exist that can be of value to the Extension agent in planning and implementing an educational program. For example, newsletters that are developed and directed toward a targeted audience appear quite popular. Meetings and other opportunities for discussion and interaction also appear to be popular among farm clientele. However, mass media methods were seldom identified as having high value for receiving specific information.

Such assessments can be highly valuable for providing educational programs that reach their intended audience(s) in a useful and efficient manner. In order to obtain a current assessment of clientele preferences of Extension program delivery methods in North Carolina, a study was conducted during the summer of 1992.

RESEARCH OBJECTIVES

The primary objective of the research project was to determine the preferences of targeted clientele for receiving specific Extension information, and the reasons for those preferences.

A second objective was to determine if clientele perceived any program delivery methods becoming more important to them in the future, and why.

A third objective was to determine if any program delivery methods were unfamiliar, but may be used by clientele for obtaining information if Extension would provide assistance in helping clientele become more familiar with the method(s).

Another objective was to determine if Extension clientele perceived any program delivery methods as becoming less important in the future, and why.

A final objective was to determine if any relationships existed between selected demographic factors and the preferences for receiving specific information, and for receiving information from Extension in the future. The demographic factors of age; first occupation; second occupation; education; dependence on Extension; years receiving Extension information; and clientele's perceived role of the agent, were selected for analysis.

METHODOLOGY

Eleven North Carolina Cooperative Extension agents originating from eleven different counties in North Carolina cooperated in this study. Each agent chose a specific subject relevant to the needs of their local publics for the focus of an educational program, and subsequently developed a comprehensive objective for the educational program. As a part of developing the educational objective, a specific audience was targeted and persons in the targeted audience were listed numerically. Seven persons were randomly selected from each agent's list and a personal interview of those selected was conducted by the agent. The random selections were made by choosing numbers from a random number

table. Seventy-seven clientele were interviewed, who represented a total of 994 people in the targeted audiences.

A questionnaire was developed and pretested, which was used by the agents during the personal interviews of clientele. In order to provide clientele a reference source, a listing of sixty-five methods were included. While the symposium is used with regularity in Extension programs, this method was unintentionally excluded from the list (this omission has been corrected, and symposium is listed on the methods sheet provided in the appendix of this paper). Responses were analyzed from each county and from all the counties combined. The sample was representative of the state geographically as all regions of the state were included.

Quantitative data were summarized and listed in tables for analysis. The Student t-test sampling distribution was used for determining differences between selected program delivery methods by various demographic factors. Qualitative analysis was performed by summarizing the input for each method described. Only the most frequently listed methods were qualitatively analyzed.

A majority of the clientele had agricultural interests, but targeted audiences included community leaders; persons interested in watershed protection; youth in-school enrichment programs; day care provider training; as well as production agriculture programs.

FINDINGS

Perhaps one of the most interesting findings was that even though great diversity existed in the interests of the targeted audiences and the program focus for those audiences, their

preferences and especially their reasons for holding those preferences were remarkably similar.

Analysis of the various demographic factors (Tables 1 through 7) indicates a mature audience that is relatively well educated. Most of the clientele have at least some dependence on Extension as an information source. Also, most have been receiving Extension information for more than five years. A majority have an occupation other than farming as their first occupation. However, a high percentage listed part-time farmer as their second occupation. Even though education is the primary mission of Extension, clientele's perception of the role of the Extension agent indicated that about 55% of clientele saw agents as either service providers or consultants. About 45% saw agents as educators.

Clientele preferences for receiving specifically targeted information is generally compatible with previous research findings, as personal visits, meetings, newsletters, demonstrations, and workshops ranked highest (Table 8). While these methods may be considered traditional, a clearly emerging newer technology is the video cassette, which was listed by nearly one-fourth of clientele as one of their five most preferred methods for receiving targeted information. Reasons given to justify their selections focused almost exclusively on being able to use these methods for their subject and audience specificity. Considerable value was also placed on being afforded the opportunity to see and do as well as to discuss the information.

For methods that clientele expect to become more important in the future, nearly all are newer and emerging technologies. However, even here, newsletters, workshops, and on-farm tests and demonstrations clearly are seen as relevant both presently and in the future by clientele (Table 9). Reasons given for selecting these methods related mostly to speed, ease, and efficiency.

In identifying methods that are unfamiliar, but willing for Extension to help them use, a great majority chosen were newer, high technology methods (Table 10).

When clientele were asked to name methods they expect to become less important in the future for receiving Extension information, essentially no methods were chosen (Table 11). For the few methods identified, reasons given were variable and inconclusive.

A t-test statistical analysis revealed some significant differences ($P < .05$) between some of the demographic factors and individual delivery methods preferred by clientele for receiving specific information (Tables 12 through 18). For example, younger clientele prefer how-to methods, such as a method demonstration, to printed materials. Yet middle age clientele have a distinct preference for printed materials such as a bulletin/pamphlet.

Years clientele have received help from Extension appears to be a significant factor in the popularity of video cassettes. Those with less than ten years involvement appear much more interested in video cassettes than do those clientele with longer involvement with Extension. On the other hand, people who have between 10 and 20 years of Extension interaction hold a significant preference for on-farm tests compared to persons with longer involvement.

When education levels and individual preferences were analyzed, college graduates were found to have a significantly higher preference for method demonstrations and video tapes than persons who had less than a college education. College graduates also held a significantly higher preference for video cassettes than those who had completed some college.

In considering role of the agent, only method demonstration was found to be significantly different between those persons who consider the agent a service provider, and those who

see the agent as a consultant. Those identifying the agent as a consultant prefer the method demonstration significantly greater than those persons interested in a service role.

Some significant differences also exist between clientele who have much or greater dependence on Extension. Those who have higher levels of dependence much prefer meetings and on-farm tests when compared to those whose dependence levels are some or less. Yet, paradoxically, video cassettes are significantly more preferred by those with less dependence than those with higher levels of dependence.

The analysis of preferred methods versus 1st occupation found some significant differences. Primarily, farmers preferred personal visits and meetings than some of the other groups, while home makers preferred method demonstrations, workshops, and video cassettes significantly more than farmers. Other clientele held higher preferences for method demonstrations and video cassettes than farmers, and less preference for meetings than the farm clientele. The retired people had less interest in personal visits and meetings than farmers, but greater interest in workshops than the farmers. The retired people also preferred workshops and field days more than other undefined clientele. Yet the other clientele preferred personal visits significantly more than retired persons.

Analysis was made of relationships between methods identified as becoming more important in the future and the various demographic factors chosen in this study (Tables 19 through 25). No significant differences were found for the factors of age, dependence on Extension, or 2nd occupation.

Those persons who have been long-time recipients of Extension information (15+ years) held a significantly higher preference for computer software than those with less than 15

years of involvement with Extension. No other significant differences existed in testing this variable.

In a test of any relationships between methods becoming more important in the future and education, the only significant relationship found college graduates holding a significantly higher selection of Fax for program delivery, than those who have not attended college.

Clientele perceptions of the role of the agent and methods identified as important in the future showed significant differences between those clientele who selected computer software and computer networks. The clientele selecting these methods saw agents in an educator role or in a consultant role significantly more than those perceiving a service role. Interestingly, those individuals perceiving a service role identified newsletters significantly more than those who see the agent as an educator.

In the analysis of any relationships between 1st occupation and methods selected as becoming more important in the future, most differences found were similar to the previous analysis of preferences of these various groups. Perhaps the most useful component of this table (considering the low numbers in each cell), is the significance of farmers selecting computer software and computer networks more than the other group. Other analysis indicated that retired individuals named video tapes as becoming more important in the future significantly more than farmers, homemakers, or other clientele. The retired clients also named method demonstration significantly more than either farmers or the other group of clientele.

DISCUSSION

Many of the findings of this research are compatible with previous reports. Yet, the audience diversity accentuates some areas where assumptions may have been made

otherwise. Perhaps most noteworthy is the strong interest that farm audiences have for high technology delivery methods such as computer technologies. Also, while these audiences continue to prefer personalized interactive, hands-on methods, their willingness to stay abreast of new technologies does not wane as they continue their interactions with Extension. Thus, it remains imperative for Extension professionals to stay abreast of newer technologies and integrate these newer delivery methods into programming activities.

Use of the newer technologies can be seen as fast, efficient, and easy for obtaining information, or can be seen as unnecessary, unavailable, complex, or useless. The findings of this research clearly indicate that persons who are college graduates favor new technologies such as Fax. Those persons who have not attended college generally did not see Fax as a viable means of information delivery. Under circumstances such as this, Extension will need to educate their clients as to the benefits of delivery methods such as Fax. Thus, through this process, educational opportunities will need to be provided clientele on both the message and means of delivery.

While many clientele continue to prefer interactive delivery means, the findings in this research demonstrate that many people wish to receive information from Cooperative Extension, but do not have a strong dependence on Extension to meet their educational needs. These individuals were found to have less preference for direct, interactive program delivery methods, and significance was found in the greater preference of video cassettes by persons with lower dependence than those with higher dependence.

These findings appear to demonstrate the need for continued efforts by Extension to provide educational opportunities through multiple delivery methods. Yet, one should be cognizant that some methods such as video cassettes may be seen as simply a library resource by the public, with little or no personal loyalties emanating to Extension for having provided the educational opportunities.

Perhaps the strongest message that clientele gave for preferring certain delivery methods was that the methods chosen provided them specific information that was subject and audience specific, and provided them an opportunity to receive the information in an understandable and personally comfortable manner. Also, while some methods may be preferred, the relevance of the subject, and availability to them was shown to be an undergirding factor, regardless of the delivery method. Perhaps this factor is best demonstrated by the 49 different methods that were chosen as one of five preferred methods for receiving the needed information.

Successful implementation of Extension education programs in the future will require knowledge of the targeted audience, its characteristics, level of knowledge, and skillful selection and use of appropriate delivery methods for the targeted audience, as well as the subject matter to be presented.

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TABLES

Table 1 ***FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (EDUCATION) N=77***

LEVEL	N	%
Less than High School Grad.	2	2.6
High School Grad.	24	31.2
Tech, Trade, or CC Grad.	12	15.6
Some College	9	11.7
College Graduate or higher	30	39.0

Table 2 ***FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (AGE) N=77***

RANGE	N	%
18-29	4	5.2
30-39	21	27.3
40-49	27	35.1
50-64	18	23.4
65 up	7	9.1

Table 3 ***FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (DEPENDENCE ON EXTENSION) N =77***

LEVEL	N	%
None	2	2.6
Little	4	5.2
Some	24	31.2
Much	24	31.2
Very Much	23	29.9

Table 4 ***FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (YEARS RECEIVING EXTENSION INFORMATION) N=77***

LEVEL	N	%
Less than 5	13	17.3
5 - 9	12	15.9
10 - 19	25	33.3
20 - 29	10	13.3
30 or More	15	20.0

Table 5 *FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (1st OCCUPATION) N=77*

OCCUPATION	N	%
Farmer	26	33.8
Homemaker	10	13.0
Other	34	44.6
Retired	6	7.8

Table 6 *FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (2nd OCCUPATION) N=77*

OCCUPATION	N	%
Farmer(part-time)	20	38.5
Homemaker	4	7.7
Other	10	19.2
Retired	18	34.6

Table 7 *FREQUENCIES BY VARIOUS DEMOGRAPHIC FACTORS (ROLE OF AGENT) N=77*

ROLE	N	%
Educator	34	44.7
Consultant	25	32.9
Service	17	22.4

TABLE 8 **Delivery Method Listed As One Among Five Most Preferred By Members Of Targeted Audiences For Receiving Specific Extension Information. N=77**

METHOD	TIMES CHOSEN	% OF CLIENTELE SELECTING METHOD
Personal visit	36	46.8
Meeting	32	41.6
Newsletter	30	39.0
Method demonstration	26	33.8
Workshop	20	26.0
Video cassette	18	23.4
Bulletin/pamphlet	16	20.8
Field day	16	20.8
On-farm test	16	20.8
Seminar	12	15.6
Fact sheet	11	14.3
Lecture	10	13.0
Tour	9	11.7
Telephone	8	10.4
Leaflet/flyer	7	9.1
Group discussion	7	9.1
Letter	7	9.1
Office visit	7	9.1
Data analysis/results	6	7.8
Slide-tape	6	7.8
Newspaper	6	7.8
Specialty publication	6	7.8
Notebook	5	6.5
Brainstorming	4	5.2
Book	3	3.9
Magazine article	3	3.9
Result demonstration	3	3.9
Interview	2	2.6
Film strip	2	2.6
Movie/film	2	2.6
Audio cassette	2	2.6
Exhibit	2	2.6
Role play	2	2.6
Television	2	2.6
Radio	2	2.6
Speech	2	2.6
Conference	1	1.3
Convention	1	1.3
Institute	1	1.3
Home study kit	1	1.3
Interactive video	1	1.3
Teletip	1	1.3
Computer software	1	1.3
Audience reaction team	1	1.3
Poster	1	1.3
Bulletin board	1	1.3
Photograph	1	1.3
Computer network	1	1.3
Show	1	1.3

TABLE 8, REASONS WHY SELECTED METHODS ARE PREFERRED BY CLIENTELE

Personal Visit - Personal, private consultation directly with agent on information that is specific to subject, and directly relevant to specific situation.

Meeting - Provides detailed and specific information directly to specific audiences, and also gives an opportunity to gain information as to what is going on both in the county and in other areas.

Newsletter - Able to provide specific information directly to specific audiences, and able to obtain information on latest developments, results, innovations, techniques that are relevant.

Method Demonstration - Able to gain specific information and understand by being able to see and do, and to get a hands-on experience.

Workshop - Able to obtain information that is audience and subject specific, and gain a hands-on experience by seeing and doing.

Video Cassette - Able to see and hear specific information and observe others discuss, share ideas, and demonstrate information that is subject specific and applicable to individual needs.

Bulletin/Pamphlet - Convenient, easy to obtain, subject specific, and able to see descriptions of information.

Field Day - Able to see and get a hands-on experience and compare results, problems, situations, opportunities, innovations, and techniques.

On-farm Test - Can benefit from other experiences, and Interest level is increased by being able to see latest developments, innovations, results, techniques, etc. that are specific to a given subject.

Seminar - Information can be focused toward specific audiences, and able to benefit from other's discussions, involvement, ideas, and experiences that relate to a specific subject.

Fact Sheet - Provides detailed, specific information in a convenient form that is easily to refer to for seeing or understanding how to implement the information.

Lecture - Can deal with specific audiences on specific subjects in a detailed manner, and can ask questions to assure understanding.

Tour - Information can be targeted to a specific audience in a seeing and doing mode, whereby results, opportunities, or problems can be compared and discussed.

Telephone - Can obtain information in a personal and private manner that is needed for practice change, and provides an opportunity to consult with the agent or specialist.

TABLE 9 **Methods Identified By Clientele As Becoming More Important In the Future For Receiving Information From Extension N=77**

METHOD	N	% CLIENTELE LISTING METHOD
Computer software	26	33.8
Computer network	22	28.6
Fax	19	24.7
Video cassette	12	15.6
Newsletter	10	13.0
Workshop	9	11.7
Satellite conferencing	8	10.4
On-farm test	8	10.4
Personal visit	7	9.1
Meeting	7	9.1
Group discussion	6	7.8
Leaflet/flyer	6	7.8
Method demonstration	6	7.8
Interactive video	5	6.5
Seminar	4	5.2
Result demonstration	4	5.2
Tour	4	5.2
Newspaper	4	5.2
Data analysis/results	4	5.2
Cable television	4	5.2
Bulletin/pamphlet	4	5.2
Field day	3	3.9
Teleconferencing	3	3.9
Radio	2	2.6
Conference	2	2.6
Television	2	2.6
Exhibit	2	2.6
Specialty publication	1	1.3
Forum	1	1.3
Book	1	1.3
Home study kit	1	1.3
Interview	1	1.3
Listening team	1	1.3
Brainstorming	1	1.3
Role play	1	1.3
Bulletin board	1	1.3
Fair	1	1.3
Networking	1	1.3
Telephone	1	1.3
Movie/film	1	1.3
Teletip	1	1.3

*** Reasons given by clientele for selecting specific methods are on the following page:**

TABLE 9 Reasons

Computer software - Becoming more dominant in the future, specific, fast, efficient, and effective information, provides opportunities to improve management, and recently bought a computer.

Computer network - Will become more dominant in the future, fast, quick, efficient, and effective means for obtaining information, can better utilize time and take advantage of new technology, and more and more computers are in use.

Fax - Get information quicker-immediate, and economical, expected to become more predominant in the future, can better utilize time, and will be a needed item of technology in the future.

Video cassette - A good means of delivery that can be reviewed easily, can watch at personal convenience and schedule, readily accessible, provides vivid presentations, and a way to take advantage of newer technologies.

Newsletter - Can gain new and innovative ideas, convenient and self directed learning, current information, readily accessible, provides lots of information, and provides specific subject matter of personal interest.

Workshop - A means of readily accessible information and can see in action.

Satellite conferencing - Expected to be more predominant in the future, and a fast and good way to have interaction.

On-farm test - Can see on-site results, can see in action, specific subject matter of interest, and there is real value in being able to see tests and results.

Personal visit - Provides on-site personal interaction, and a means of contacting people that do not attend meetings.

Meeting - Gain new and innovative ideas, means of exchanging information, gain information for fast paced agriculture, and enjoy the fellowship.

Group discussion - A means for sharing and exchanging ideas, makes learning easier, a means of comparing situations of others, get answers to questions, and interaction with peers.

Leaflet/flyer - Still a good source for information, readily accessible, and up-to-date information.

Method demonstration - Can see how to do, and can learn bette[illegible] by seeing and doing.

TABLE 10 **Delivery Methods That Extension Clientele Identified As Unfamiliar But Willing To Use If Extension Helped Them To Become Familiar With These Methods N=77**

METHOD	N	% CLIENTELE IDENTIFYING METHOD
Computer software	21	27.3
Computer network	13	16.9
Fax	8	10.4
Satellite conferenceing	6	7.8
Teleconferencing	6	7.8
Home study kit	5	6.5
Teletip	5	6.5
Video casette	5	6.5
Interactive video	4	5.2
Networking	4	5.2
Leaflet/flyer	3	3.9
Notebook	3	3.9
Brainstorming	3	3.9
Group discussion	3	3.9
Fact sheet	2	2.6
Bulletin/pamphlet	2	2.6
Audience reaction team	2	2.6
Seminar	2	2.6
Audio casette	2	2.6
Tour	1	1.3
On-farm test	1	1.3
Data analysis/results	1	1.3
Cable television	1	1.3
Specialty publication article	1	1.3
Listening team	1	1.3
Novelty	1	1.3
Film strip	1	1.3
Method demonstration	1	1.3
Case study	1	1.3

TABLE 11 Program Delivery Methods That Extension Clientele Identified As Expected To Be Less Important For Receiving Extension Information In The Future N=77

METHOD	N	% CLIENTELE IDENTIFYING METHOD
Newspaper	3	3.9
Fax	3	3.9
Result demonstration	2	2.6
Personal visit	2	2.6
Leaflet/flyer	2	2.6
Conference	2	2.6
Computer network	2	2.6
Teletip	2	2.6
Convention	1	1.3
Seminar	1	1.3
Workshop	1	1.3
Tour	1	1.3
Office visit	1	1.3
Home study kit	1	1.3
Journal article	1	1.3
Notebook	1	1.3
Computer software	1	1.3
Interview	1	1.3
Group discussion	1	1.3
Exhibit	1	1.3
Bulletin board	1	1.3
Networking	1	1.3
Teleconferencing	1	1.3
Slide-tape	1	1.3
Video cassette	1	1.3
Film strip	1	1.3
Audio cassette	1	1.3

REASONS

*** No definitive reasons were summarized due to the low percentage listing of individual methods. Reasons that were given by respondents were variable and implications could not be drawn.**

Table 12 **Relationship between Preferred Methods by Various Demographic Factors (2nd OCCUPATION)**

METHOD	FARMER	%	HOME-MAKER	%	OTHER	%	RETIRED	%
Personal visit	10	15.2	2	18.2	2	7.1	11	17.7
Meeting	5	7.6	1	9.1	3	10.7	14	22.6
Newsletter	8	12.1	2	18.2	4	14.3	10	16.1
Method demonstration	7	11	1	9.1	6	21.4	1	1.6
Workshop	3	4.5	1	9.1	3	10.7	3	4.8
Video cassette	4	6.1	2	18.2	3	10.7	0	0
Bulletin/pamphlet	5	7.6	0	0	2	7.1	3	4.8
Field day	6	9.1	0	0	1	3.6	4	6.4
On-farm test	7	11	0	0	1	3.6	6	9.7
Seminar	4	6.1	1	9.1	1	3.6	1	1.6
Fact sheet	2	3.1	0	0	2	7.1	1	1.6
Lecture	1	1.5	0	0	0	0	4	6.4
Tour	3	4.5	1	9.1	0	0	1	1.6
Telephone	1	1.5	0	0	0	0	3	4.8
Total	**66**		**11**		**28**		**62**	

Table 13 **Relationship between Preferred Methods by Various Demographic Factors (Age)**

METHOD	< 40	%	40 - 49	%	50+	%
Personal visit	11	13.3	15	17.4	10	11.8
Meeting	9	10.8	12	14.0	11	12.9
Newsletter	9	10.8	11	12.8	10	11.8
Method demonstration	12	14.5**	9	10.5	5	5.9
Workshop	9	10.8	3	3.5	8	9.4
Video cassette	8	9.6	5	5.8	3	3.5
Bulletin/pamphlet	2	2.4*	9	10.5	4	4.7
Field day	3	3.6	5	5.8	8	9.4
On-farm test	4	4.8	7	8.1	5	5.9
Seminar	5	6.0	3	3.5	4	4.7
Fact sheet	6	7.2	2	2.3	2	2.4
Lecture	5	6.0	2	2.3	3	3.5
Tour	1	1.2	2	2.3	6	7.1
Telephone	0	0	2	2.3	6	7.1
Total	**83**		**86**		**85**	

<40 vs 40-49 = * P<.05
<40 vs 50+ = ** P<.05
40-49 vs 50+ = NO DIFFERENCES

Table 14 **Relationship between Preferred Methods by Various Demographic Factors (YEARS RECEIVING EXTENSION HELP)**

METHOD	< 10	%	10-19	%	20 +	%
Personal visit	11	13.3	12	12.8	13	16.9
Meeting	9	10.8	14	14.9	9	11.7
Newsletter	9	10.8	10	10.6	11	14.3
Method demonstration	8	9.6	9	9.6	9	11.7
Workshop	8	9.6	7	7.4	5	6.5
Video cassette	11	13.3*	3	3.2	2 **	2.6
Bulletin/pamphlet	5	6.0	6	6.4	4	5.2
Field day	3	3.6	5	5.3	8	10.4
On-farm test	4	4.8	10 ***	10.6	2	2.6
Seminar	7	8.4	3	3.2	2	2.6
Fact sheet	1	1.2	6	6.4	2	2.6
Lecture	5	6.0	2	2.1	2	2.6
Tour	1	1.2	4	4.3	4	5.2
Telephone	1	1.2	3	3.2	4	5.2
Total	**83**		**94**		**77**	

1. <10 vs 10-19 = * P<.05
2. <10 vs 20+ = ** P<.05
3. 10-19 vs 20+ = *** P<.05

Table 15 **Relationship between Preferred Methods by Various Demographic Factors (EDUCATION)**

METHOD	LESS THAN COLLEGE	%	SOME COLLEGE	%	COLLEGE GRADUATE or >	%
Personal visit	13	15.9	12	15.6	11	11.3
Meeting	12	14.6	10	13.0	10	10.3
Newsletter	12	14.6	10	13.0	8	8.2
Method demonstration	4	4.9	9	11.7	13 *	13.4
Workshop	6	7.3	7	9.1	7	7.2
Video cassette	3	3.7	2 **	2.6	11 *	11.3
Bulletin/pamphlet	2	2.4	4	5.2	9	9.3
Field day	7	8.5	5	6.5	4	4.1
On-farm test	8	9.6	4	5.2	4	4.1
Seminar	3	3.7	3	3.9	6	6.2
Fact sheet	2	2.4	4	5.2	4	4.1
Lecture	3	3.7	0	0	7	7.2
Tour	4	4.9	3	3.9	2	2.1
Telephone	3	3.7	4	5.2	1	1.0
Total	**82**		**77**		**97**	

1. <C vs SOME = NO DIFFERENCES
2. <C vs CG = * P <.05
3. SOME vs CG = ** P <.05

Table 16 **Relationship between Preferred Methods by Various Demographic Factors (ROLE OF EXTENSION AGENT)**

METHOD	CONSUL-TANT	%	EDUCA-TOR	%	SERVICE	%
Personal visit	11	13.3	15	13.9	10	15.9
Meeting	8	9.6	14	13.0	9	14.3
Newsletter	9	10.8	13	12.0	8	12.7
Method demonstration	12	14.5	10	9.3	4 *	6.3
Workshop	6	7.2	8	7.4	6	9.5
Video cassette	6	7.2	8	7.4	2	3.2
Bulletin/pamphlet	5	6.0	7	6.5	2	3.2
Field day	4	4.8	8	7.4	4	6.3
On-farm test	3	3.6	7	6.5	6	9.5
Seminar	4	4.8	4	3.7	4	6.3
Fact sheet	5	6.0	4	3.7	1	1.6
Lecture	1	1.2	8	7.4	1	1.6
Tour	6	7.2	1	1.0	2	3.2
Telephone	3	3.6	1	1.0	4	6.3
Total	**83**		**108**		**63**	

1. CON vs ED = NO DIFFERENCES
2. CON vs SER = * P <.05
3. ED vs SER = NO DIFFERENCES

Table 17 **Relationship between Preferred Methods by Various Demographic Factors (DEPENDENCE)**

METHOD	SOME OR LESS	%	MUCH OR >		%
Personal visit	12	12.5	24		15
Meeting	7	7.3	25	*	15.6
Newsletter	13	13.5	17		10.6
Method demonstration	13	13.5	13		8.1
Workshop	9	9.4	11		6.9
Video cassette	12	12.5	4	*	2.0
Bulletin/pamphlet	6	6.2	9		5.6
Field day	5	5.2	11		6.9
On-farm test	2	2.1	14	*	8.7
Seminar	5	5.2	7		4.4
Fact sheet	4	4.2	6		3.7
Lecture	4	4.2	6		3.7
Tour	1	1.0	8		5.0
Telephone	3	3.1	5		3.1
Total	**96**		**160**		

*P < .05

Table 18 **Relationship between Preferred Methods by Various Demographic Factors (1st OCCUPATION)**

METHOD	FARMER	%	HOME-MAKER	%	OTHER	%	RETIRED	%
Personal visit	17 *	17.2	2	7.1	16 ****	14.8	1 ***	5.3
Meeting	20 *	20.2	2	7.1	9 **	8.4	1 ***	5.3
Newsletter	14	14.1	3	10.7	12	11.1	1	5.3
Method demonstration	4 *	4.1	5	17.9	14 **	13.0	2	10.5
Workshop	5 **	5.1	4	14.3	7 ****	6.5	4 ***	21.1
Video cassette	0 *	0	4	14.3	11 **	10.2	1	5.3
Bulletin/pamphlet	6	6.1	1	3.6	7	6.5	1	5.3
Field day	8	8.1	1	3.6	4 ****	3.7	3	15.8
On-farm test	8	8.1	0	0	8	7.4	0	5.3
Seminar	2	2.1	2	7.1	7	6.5	1	5.3
Fact sheet	3	3.1	2	7.1	4	3.7	1	5.3
Lecture	3	3.1	1	3.6	5	4.6	1	5.3
Tour	3	3.1	1	3.6	3	2.8	1	5.3
Telephone	6	6.1	0	0	1	1.0	1	5.3
Total	**99**		**28**		**108**		**19**	

1. FARM VS HM = * P<.05
2. FARM VS OTHER = ** P<.05
3. FARM VS RET = *** P<.05
4. HM VS OTHER = NO DIFFERENCES
5. HM VS RET = NO DIFFERENCES
6. OTHER VS RET = **** P<.05

'able 19 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (AGE)**

METHOD	< 40	%	40 +	%
Computer Software	8	16	18	18.8
Computer Network	9	18	13	13.5
Fax	7	14	12	12.5
Video Cassette	3	6	9	9.4
Newsletter	5	10	5	5.2
Workshop	4	8	5	5.2
Satellite Conference	4	8	4	4.2
On-farm test	2	4	6	6.3
Personal visit	0	0	7	7.3
Meeting	3	6	4	4.2
Group discussion	2	4	4	4.2
Leaflet/flyer	1	2	5	5.2
Method demonstration	2	4	4	4.2
Total	**50**		**96**	

No significant Differences

Table 20 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (YEARS RECEIVING EXTENSION HELP)**

METHOD	< 15	%	15 +	%
Computer Software	8	10.3	17	23.3*
Computer Network	8	10.3	13	17.8
Fax	8	10.3	9	12.3
Video Cassette	6	7.7	6	8.2
Newsletter	7	9.0	3	4.1
Workshop	7	9.0	2	2.7
Satellite Conference	4	5.1	3	4.1
On-farm test	4	5.1	4	5.5
Personal visit	3	3.8	4	5.5
Meeting	2	2.6	5	6.8
Group discussion	6	7.7	0	0
Leaflet/flyer	2	2.6	4	5.5
Method demonstration	3	3.8	3	4.1
Total	**78**		**73**	

* P < .05

Table 21 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (EDUCATION)**

METHOD	LESS THAN COLLEGE	%	SOME COLLEGE	%	COLLEGE GRADUATE or >	%
Computer Software	7	16.3	9	22.0	10	16.1
Computer Network	5	11.6	8	19.5	9	14.5
Fax	3	7.0*	5	12.2	11	*17.7
Video Cassette	3	7.0	3	7.3	6	9.7
Newsletter	5	11.6	3	7.3	2	3.2
Workshop	2	4.6	1	2.4	6	9.7
Satellite Conference	1	2.3	3	7.3	4	6.5
On-Farm test	5	11.6	1	2.4	2	3.2
Personal visit	3	7.0	1	2.4	3	4.8
Meeting	2	4.6	3	7.3	2	3.2
Group discussion	1	2.3	1	2.4	4	6.5
Leaflet/flyer	4	9.3	1	2.4	1	1.6
Method demonstration	2	4.6	2	4.9	2	3.2
Total	**43**		**41**		**62**	

1. LESS COLLEGE vs. SOME COLLEGE = NO DIFFERENCES
2. LESS COLLEGE vs. COLL. GRAD = * P<.05
3. SOME COLL. vs. COLL. GRAD = NO DIFFERENCES

Table 22 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (ROLE OF AGENT)**

METHOD	CONSULTANT	%	EDUCATOR	%	SERVICE	%
Computer Software	14 **	26.4	12	18.2*	0	0
Computer Network	10 **	18.9	12	18.2*	0	0
Fax	8	15.1	9	13.6	2	7.7
Video Cassette	3	5.7	6	9.1	3	11.5
Newsletter	3	5.7	3	4.5*	4	15.4
Workshop	1	1.9	5	7.6	3	11.5
Satellite Conference	3	5.7	3	4.5	2	7.7
On-Farm test	1	1.9	4	6.1	3	11.5
Personal visit	2	3.8	4	6.1	1	3.8
Meeting	5	9.4	1	1.5	1	3.8
Group discussion	1	1.9	3	4.5	1	3.8
Leaflet/flyer	1	1.9	2	3.0	3	11.5
Method demonstration	1	1.9	2	3.0	3	11.5
Total	**53**		**66**		**26**	

1. CON vs ED = NO DIFFERENCES
2. ED vs SER = * P<.05
3. CON vs SER = ** P<.05

Table 23 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (DEPENDENCE)**

METHOD	SOME OR LESS	%	MUCH OR >	%
Computer Software	10	16.4	16	18.8
Computer Network	8	13.1	14	16.5
Fax	7	11.5	12	14.1
Video Cassette	6	9.8	6	7.1
Newsletter	5	8.2	5	5.9
Workshop	6	9.8	3	3.5
Satellite Conference	4	6.6	4	4.7
On-farm test	1	1.6	7	8.2
Personal visit	2	3.3	5	5.9
Meeting	4	6.6	3	3.5
Group discussion	4	6.6	2	2.4
Leaflet/flyer	3	4.9	3	3.5
Method demonstration	1	1.6	5	5.9
Total	**61**		**85**	

No Differences

Table 24 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (1st OCCUPATION)**

METHOD	FARMER	%	HOME-MAKER	%	OTHER	%	RETIRED	%
Computer Software	11	24*	3	13.6	9	14.1	3	23.1
Computer Network	10	22*	3	13.6	7	11	2	15.4
Fax	6	13.0	2	9.1	10	16	1	7.7
Video Cassette	1	2.2	2 ***	9.1	6 ****	9.4	3 **	23.1
Newsletter	3	6.5	2	9.1	4	6.3	1	7.7
Workshop	2	4.3	2	9.1	5	7.8	0	0
Satellite Conference	1	2.2	1	4.5	6	9.4	0	0
On-farm test	2	4.3	1	4.5	4	6.3	1	7.7
Personal visit	3	6.5	2	9.1	2	3.1	0	0
Meeting	2	4.3	2	9.1	3	4.7	0	0
Group discussion	2	4.3	0	0	4	6.3	0	0
Leaflet/flyer	2	4.3	1	4.5	2	3.1	0	0
Method demonstration	1	2.2	1	4.5	2****	3.1	2 **	15.4
Total	**46**		**22**		**64**		**13**	

1. FARMER VS HOME = NO DIFFERENCES
2. FARMER VS OTHER = P<.05
3. FARMER VS RETIRED = ** P<.05
4. HOME VS OTHER = NO DIFFERENCES
5. HOME VS RETIRED = *** P<.05
6. OTHER VS RETIRED = **** P<.05

Table 25 **Relationship between Methods Identified as Becoming More Important in the Future by Various Demographic Factors (2nd OCCUPATION)**

METHOD	FARMER	%	HOME-MAKER	%	OTHER	%	RETIRED	%
Computer Software	7	20.6	1	14.3	5	20	5	19.2
Computer Network	2	5.9	1	14.3	4	16	5	19.2
Fax	4	11.8	0	0	5	20	2	7.7
Video Cassette	5	14.7	0	0	3	12	0	0
Newsletter	2	5.9	0	0	2	8	3	11.5
Workshop	1	2.9	3	42.3	1	4	2	7.7
Satellite Conference	2	5.9	0	0	2	8	0	0
On-farm test	5	14.7	0	0	0	0	1	3.8
Personal visit	2	5.9	1	14.3	1	4	2	7.7
Meeting	1	2.9	0	0	0	0	2	7.7
Group discussion	0	0	1	14.3	1	4	2	7.7
Leaflet/flyer	1	2.9	0	0	1	4	2	7.7
Method demonstration	2	5.9	0	0	0	0	0	0
Total	**34**		**7**		**25**		**26**	

APPENDIX

PROGRAM DELIVERY METHODS IN EXTENSION EDUCATION

conference
convention
seminar
panel
forum
meeting
lecture
speech
institute
workshop
symposium

newsletter
tour
method demonstration
result demonstration
on-farm test
data analysis/results
personal visit
office visit
home study kit
field day

newspaper
radio
television
cable television
magazine article
journal article
specialty publication article
fact sheet
leaflet/flyer
notebook
letter
book
bulletin/pamphlet

fax
computer software
satellite conferencing
interactive video
computer network

audience reaction team
interview
listening team
case study
brainstorming
group discussion
role play

skit
exhibit
poster
show
game
bulletin board
puppet
photograph
fair
church bulletin
networking
novelty

teleconferencing
telephone
movie/film
teletip
slide-tape
video cassette
film strip
audio cassette

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